AGASTHYA OMKUMAR

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SKILLS

- **Digital Marketing & Campaign Management:** SEM, PPC, Google Ads (theoretical & practical knowledge), Campaign performance tracking, A/B testing, ROI analysis, Marketing operations, content metadata management, audience segmentation, Business development, sales enablement, market research
- **Data & Analytics:** Google Analytics, SEO, Email Marketing, Social Media Marketing, Data-fusion, predictive modelling, KPI dashboards (Streamlit), Statistical analysis, time-series forecasting, clustering, Data cleaning, ETL, data visualization (Matplotlib, Seaborn)
- **Technical Stack:** Python, SQL, R, MATLAB, Tableau/Power BI (basic), Excel, Google Data Studio, Azure, AWS, Git, Linux, .NET (exposure), C#, HTML/CSS (basic)

PROJECTS

- **Fund-Trail Analysis Tool:** Engineered a Flask-based analytics platform applying Hidden Markov Models to generate fund-performance forecasts, achieving 92 % prediction accuracy on synthetic data. Presented at the KAVACH Cybersecurity Hackathon, ranking Top 5 among 3,900 teams nationwide.
- **Sign-Language Recognition System:** Developed a custom LRCN deep-learning model with 96 % accuracy for gesture classification; built a real-time inference pipeline and a user-friendly UI, showcasing expertise in computer-vision pipelines and performance monitoring.
- **HR Attrition Analytics (IBM Dataset):** Performed end-to-end EDA, feature engineering, and predictive modelling to identify key drivers of employee turnover, delivering insights that could reduce attrition risk by 15 % and illustrating audience-segmentation skills applicable to marketing campaigns.

EXPERIENCE

CAIR, DRDO   Aug 2023 - Mar 2024
Project Trainee   Bengaluru, KA

- Designed and implemented data-fusion pipelines that combined visual sensor feeds with AIS maritime data, improving object-tracking accuracy by 18 % in occlusion-heavy scenarios.
- Built interactive Streamlit dashboards to monitor model performance (precision, recall, latency) and delivered weekly KPI reports to senior engineers.
- Automated model training on GPU-enabled workstations and edge devices, reducing training time from 6 h to 2.5 h per iteration.
- Conducted exploratory analysis of campaign-style datasets (e.g., ad-impression logs) to identify patterns that informed resource-allocation recommendations for surveillance missions.

Cognizant Technology Solutions   Mar 2021 - Sep 2021
Intern   Bengaluru, KA

- Completed intensive .NET and Python training; built a prototype SQL-backed web app for internal reporting.
- Developed SQL database schemas and wrote optimized queries that reduced report generation time by 30 %.
- Collaborated with cross-functional teams to document requirements, reinforcing strong written and verbal communication.

EDUCATION

Defence Institute of Advanced Technology (DIAT)   2022 - 2024
M.Sc. Applied Mathematics   India

BNM Institute of Technology (VTU)   2017 - 2021
B.E. Mechanical Engineering   India